

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for controlling an amount of power that may be applied to a power amplifier of a transmitter unit of a satellite-based data communications system, the method comprising:

delivering a transmission signal from a satellite modem to the transmitter unit of the satellite-based data communications system;

monitoring, at the transmitter unit, a direct current component of an input signal applied to the power amplifier of the transmitter unit to determine when the direct current component of the input signal applied to the power amplifier exhibits a predetermined characteristic, wherein said predetermined characteristic is exhibited when, in a graph of input power compared to said direct current component, said direct current component begins to plateau;

in response to control signals received from a selected element of the satellite-based data communications system, allowing for increased input signal power to be applied to the power amplifier of the transmitter unit so long as the direct current component of the input signal applied to the power amplifier does not exhibit the predetermined characteristic; and

preventing increased input signal power from being applied to the power amplifier of the transmitter unit when the direct current component of the input signal exhibits the predetermined characteristic.

2. (Original) The method of claim 1, wherein the transmitter unit comprises a transmitter/receiver (transceiver) unit.

3. (Original) The method of claim 1, wherein the step of preventing increased input signal power from being applied to the power amplifier of the transmitter unit comprises controlling a level of the input signal within the transmitter unit with an automatic gain or level control circuit.

4. (Original) The method of claim 1 further comprising:
generating a signal indicative of the level of output signal power being produced by the transmitter unit; and

transmitting, via the transmitter unit and to a satellite of the satellite-based data communications system, a signal descriptive of the level of output signal power currently being produced by the transceiver unit.

5. (Original) The method of claim 4 further comprising:
transmitting from the selected element of the satellite-based communications system to the satellite modem a signal for effecting a variation of the level of output signal power being produced by the transmitter unit.

6. (Original) The method of claim 1 wherein the selected element of the satellite-based communications system comprises either a satellite or a satellite communications network.

7. (Currently Amended) A system for regulating an amount of power provided to a power amplifier of a transmitter unit of a satellite-based data communications system, the system comprising:

a modem for delivering a transmission signal to the power amplifier of the transmitter unit and for regulating an amount of input signal power to be provided to the transmitter unit;

a current monitor, in the transmitter unit, for monitoring a level of a direct current provided by a DC current regulator to the power amplifier of the transmitter unit; and

a circuit for preventing an increased amount of power from being provided to the power amplifier of the transmitter unit when the level of the direct current provided to the power amplifier achieves a predetermined threshold, wherein said predetermined threshold is approximately the point where the monitored direct current begins to plateau when the input power is increased.

8. (Original) The system of claim 7, wherein the transmitter unit comprises a transmitter/receiver (transceiver) unit.

9. (Original) The system of claim 7, wherein the circuit for preventing an increased amount of input signal power from being applied to the power amplifier comprises an automatic gain or level control circuit.

10. (Original) The system of claim 7, wherein the circuit for preventing an increased amount of input signal power from being applied to the power amplifier comprises a processor that discontinues an operation of the transmitter unit when the level of the direct current provided to the power amplifier achieves the predetermined threshold.

11. (Currently Amended) A circuit for regulating an amount of power to be provided from a modem to a power amplifier of a transmitter unit of a satellite-based data communications system, the circuit comprising:

means for monitoring, in the transmitter unit, an amount of current into the power amplifier of the transmitter unit; and

means for limiting the power produced by the transmitter unit when the amount of current applied to the power amplifier achieves a predetermined threshold, wherein said predetermined threshold is approximately the point where the monitored direct current approaches a plateau as

the input power is increased to the power amplifier.

12. (Original) The circuit of claim 11, wherein the transmitter unit comprises a transmitter/receiver (transceiver) unit.

13. (Original) The circuit of claim 11 further comprising:

means for providing to a modem associated with the transmitter unit an indication of a strength of a signal transmitted from the transmitter unit to a satellite; and

means for varying the power produced by the transmitter unit in response to the indication of the strength of the signal transmitted from the transmitter unit to the satellite.

14. (Currently Amended) A transmitter unit power control system for use with satellite-based data communications systems, the transmitter unit power control system comprising:

a ~~modulator circuit~~ modem for providing a data signal to a transmitter unit;

a power amplifier circuit provided within the transmitter unit for amplifying the data signal and causing the amplified data signal to be transmitted to a satellite via a radio frequency communications link;

a DC current source configured to provide a DC current to at least a final stage of the power amplifier circuit;

a current monitor, provided within the transmitter unit, for monitoring a characteristic of the DC current provided by a regulator to the final stage of the power amplifier circuit;

a comparator circuit coupled to the current monitor and configured to determine when the direct current exhibits a predetermined characteristic; and

a telemetry circuit coupled to the comparator circuit and configured to provide a signal to a power regulator circuit that is not located in the transmitter unit, wherein the power regulator

circuit is configured to limit the power level of the data signal provided to the transmitter unit when the direct current exhibits the predetermined characteristic which comprises the direct current component approaching a plateau as the input power is increased to the power amplifier.
~~and a power regulator circuit associated with the transmitter unit.~~

15. (Original) The transmitter unit power control system of claim 14, wherein the current monitor is configured to directly monitor the DC current applied to the final stage of the power amplifier circuit.

16. (Currently Amended) A method for controlling a level of an input signal applied to a power amplifier of a transmitter unit of a satellite-based telecommunications system, the method comprising:

monitoring, within the transmitter unit, a direct current into the power amplifier to determine when the direct current exhibits a predetermined characteristic,

communicating a signal from the transmitter unit to a power regulator that is not located in the transmitter unit, wherein the signal indicates whether the direct current exhibits a predetermined characteristic, and

limiting the level of the input signal applied to the transmitter unit ~~power amplifier~~ when the direct current exhibits the predetermined characteristic, wherein said predetermined characteristic comprises a significant reduction in the amount of increase of the direct current component as the input power is increased to the power amplifier.